

This listing of claims replaces all prior versions, and listings of claims in the instant application:

Listing of Claims:

1. (Withdrawn) A method for processing a drawing command on a host computer in a computer system having a host computer and a display computer, the method comprising:
determining if the drawing command draws text to the screen; and
instructing the display computer to perform an equivalent action to the drawing command using a cache of one or more sets of one or more character images if the drawing command draws text to the screen.
2. (Withdrawn) The method of claim 1, further comprising:
managing said cache of one or more sets of one or more character images from the host computer.
3. (Withdrawn) The method of claim 2, wherein said managing includes:
maintaining a list of sets of character images currently cached on the display computer; and
updating said list as needed in response to said drawing command.
4. (Cancelled) - Please cancel Claim 4, without prejudice.
5. (Cancelled) - Please cancel Claim 5, without prejudice.

6. (Cancelled) - Please cancel Claim 6, without prejudice.

7. (Cancelled) - Please cancel Claim 7, without prejudice.

8. (Currently Amended) ~~The method of claim 7,~~
A method for reducing the storage or bandwidth
requirements of a graphics image or reducing CPU usage in a
computer system, the method comprising:
 recording a text command executed to create a portion
of the graphics image;
 using said text command to update a data structure
with information;
 compressing one or more sub-images of the graphics
image using a compression scheme, each of said sub-images
having a location, said location and said compression scheme
for each of said sub-images chosen based on said information in
said data structure, wherein;
 said data structure identifies the portion of
the graphics image that was created with a specific
drawing command, further wherein;
 said data structure includes a list specifying
text regions, text strings, character set
identifiers, and/or colors;
 determining if a set of character images
compatible with a set of character images utilized in
the text command already exists in a cache;
 adding the set of character images utilized in the
text command to a display computer cache if the set of
character images utilized in the text command does not already
exist in a cache; and

utilizing said set of character images to display
said one or more sub-images of the graphics image created using
the text command, wherein said adding the set of character
images utilized in the text command includes:

determining if there is enough room in said cache on
said display computer for the set of character images;

removing cache entries until there is enough room in
said cache, if there is not enough room in said cache on said
display computer for the set of character images;

sending a request to said display computer to create
one or more new cache entries for the set of character images;
and

adding the set of character images to a list of sets
of character images currently cached on said display computer.

9. (Original) The method of claim 8, where said
removing cache entries includes taking into account the last
time the cache entry was used.

10. (Previously Presented) The method of claim 8,
wherein said removing cache entries includes:

removing one or more cache entries from a list of
cache entries on a host computer; and

sending one or more requests to said display computer
to remove said cache entries.

11. (Withdrawn) A method for reducing the storage or
bandwidth requirements of a graphics image or reducing CPU
usage in a computer system, the method comprising:

detecting a text command executed to create a portion
of the graphics image;

computing a drawn-to region from said text command;
and

adding an entry specifying the text string, character set identifier, color, and text region to a linked list of text entries.

12. (Withdrawn) The method of claim 11, further comprising:

transmitting one or more messages instructing the display computer to draw the image using the character image cache entries.

13. (Withdrawn) The method of claim 12, further comprising:

determining if a set of character images compatible with a set of character images utilized in the text command already exists in the cache; and

adding the set of character images utilized in the text command to the display computer cache if a set of character images compatible with a set of character images utilized in the text command does not already exist in the cache; and

utilizing said set of character images to display said one or more sub-images of the graphics images created using the text command.

14. (Withdrawn) The method of claim 13, wherein said adding the set of character images utilized in the text command includes:

determining if there is enough room in said cache on said display computer for the set of character images;

removing cache entries until there is enough room in said cache, if there is not enough room in said cache on display computer for the set of character images;

sending a request to said display computer to create one or more new cache entries for the set of character images; and

adding the set of character images to said list of sets of character images currently cached on said display computer.

15. (Withdrawn) The method of claim 14, where said removing cache entries includes taking into account the last time the cache entry was used.

16. (Withdrawn) The method of claim 14, wherein said removing cache entries includes:

removing one or more cache entries from the list of cache entries on the host computer; and

sending one or more requests to said display computer to remove said cache entries.

17. (Withdrawn) The method of claim 10, further comprising subtracting said drawn-to region from one or more existing fill, miscellaneous, or RGB regions.

18. (Withdrawn) An apparatus for processing a drawing command on a host computer in a computer system having a host computer and a display computer, the apparatus comprising:

a text drawing command determiner; and

a display computer equivalent action perform instructor coupled to said text drawing command determiner.

19. (Withdrawn) The apparatus of claim 18, further comprising:

a set of character images cache manager coupled to said display computer equivalent action perform instructor.

20. (Withdrawn) The apparatus of claim 19, wherein said set of character images cache manager includes:

a display computer set of character images cache list maintainer; and

a display computer set of character images cache list updater coupled to said display computer set of character images cache list maintainer.

21. (Cancelled) - Please cancel Claim 21, without prejudice.

22. (Cancelled) - Please cancel Claim 22, without prejudice.

23. (Currently Amended) ~~The apparatus of claim 22~~

An apparatus for reducing the storage or bandwidth requirements of a graphics image or reducing CPU usage in a computer system, comprising:

a text command recorder;

a data structure updater coupled to said text command recorder;

an image compressor coupled to said data structure updater, said image compressor for compressing one or more sub-images of the graphics image using a compression scheme, said compression scheme for each of said sub-images chosen based on said information in said data structure;

a display computer cache compatible set of character images determiner coupled to said text command recorder;

a display computer cache set of character images adder coupled to said display computer cache compatible set of character images determiner; and

a display computer set of character images displayer
coupled to said display computer cache set of character images
adder ,wherein said display computer cache set of character
images adder includes:

a display computer cache room determiner;
a cache entry remover and cache entry remover request
sender coupled to said display computer cache room determiner;
a new cache entry display computer request sender
coupled to said display computer cache room determiner; and
a display computer cache set of character images list
adder coupled to said new cache entry display computer request
sender.

24. (Withdrawn) An apparatus for reducing the storage or
bandwidth requirements of a graphics image or reducing CPU
usage in a computer system, the method comprising:

a text command detector;
a drawn-to region computer coupled to said text
command detector; and
a text string, character set identifier, color, and
region linked list entry adder coupled to said drawn-to region
computer.

25. (Withdrawn) The apparatus of claim 24, further
comprising a text region transmitter coupled to said text
string, character set identifier, color, and region linked list
entry adder.

26. (Withdrawn) The apparatus of claim 24, further
comprising:

a display computer cache compatible set of character
images determiner coupled to said text command detector;

a display computer cache set of character images adder coupled to said display computer cache compatible set of character images determiner; and

a display computer set of character images displayer coupled to said display computer cache set of character images adder.

27. (Withdrawn) The apparatus of claim 26, wherein said display computer cache set of character images adder includes:

a display computer cache room determiner;

a cache entry remover and cache entry remover request sender coupled to said display computer cache room determiner;

a new cache entry display computer request sender coupled to said display computer cache room determiner; and

a display computer cache set of character images list adder coupled to said new cache entry display computer request sender.

28. (Withdrawn) The apparatus of claim 24, further comprising a drawn-to region to fill, miscellaneous, and RGB region remover coupled to said text command detector.

29. (Withdrawn) An apparatus for processing a drawing command on a host computer in a computer system having a host computer and a display computer, the apparatus comprising:

means for determining if the drawing command draws text to the screen; and

means for instructing the display computer to perform an equivalent action to the drawing command using a cache of one or more sets of one or more character images if the drawing command draws text to the screen.

30. (Withdrawn) The apparatus of claim 29, further comprising:

means for managing said cache of one or more sets of one or more character images from the host computer.

31. (Withdrawn) The apparatus of claim 30, wherein said means for managing includes:

means for maintaining a list of sets of character images currently cached on the display computer; and

means for updating said list as needed in response to said drawing command.

32. (Cancelled) - Please cancel Claim 32, without prejudice.

33. (Cancelled) - Please cancel Claim 33, without prejudice.

34. (Cancelled) - Please cancel Claim 34, without prejudice.

35. (Cancelled) - Please cancel Claim 35, without prejudice.

36. (Currently Amended) ~~The apparatus of claim 35~~
An apparatus for reducing the storage or bandwidth requirements of a graphics image or reducing CPU usage in a computer system, the apparatus comprising:

means for recording a text command executed to create a portion of the graphics image;

means for using said text command to update a data structure with information;

means for compressing one or more sub-images of the graphics image using a compression scheme, each of said sub-images having a location, said location and said compression scheme for each of said sub-images chosen based on said information in said data structure, wherein;

said data structure identifies the portion of the graphics image that was created with a specific drawing command, further wherein;

said data structure includes a list specifying text regions, text strings, character set identifiers, and /or colors;

means for determining if a set of character images compatible with a set of character images utilized in the text command already exists in a cache;

means for adding the set of character images utilized in the text command to a display computer cache if the set of character images utilized in the text command does not already exist in a cache; and

means for utilizing said set of character images to display said one or more sub-images of the graphics image created using the text command ,wherein said means for adding the set of character images utilized in the text command includes:

means for determining if there is enough room in said cache on said display computer for the set of character images;

means for removing cache entries until there is enough room in said cache and sending one or more requests to said display computer to remove said cache entries, if there is not enough room in said cache on display computer for the set of character images;

means for sending a request to said display computer to create a new cache entry for the set of character images; and

means for adding the set of character images to a list of sets of character images currently cached on said display computer.

37. (Original) The apparatus of claim 36, where said means for removing cache entries includes means for taking into account the last time the cache entry was used.

38. (Withdrawn) An apparatus for reducing the storage or bandwidth requirements of a graphics image or reducing CPU usage in a computer system, the apparatus comprising:

means for detecting a text command executed to create a portion of the graphics image;

means for computing a drawn-to region from said text command; and

means for adding an entry specifying the text string, character set identifier, color, and text region to a linked list of text regions.

39. (Withdrawn) The apparatus of claim 38, further comprising:

means for transmitting one or more messages instructing the display computer to draw the image using the character image cache entries.

40. (Withdrawn) The apparatus of claim 39, further comprising:

means for determining if a set of character images compatible with a set of character images utilized in the text command already exists in the cache; and

means for adding the set of character images utilized in the text command to the display computer cache if a set of character images compatible with a set of character images

utilized in the text command does not already exist in the cache; and

means for utilizing said set of character images to display said one or more sub-images of the graphics images created using the text command.

41. (Withdrawn) The apparatus of claim 40, wherein said means for adding the set of character images utilized in the text command includes:

means for determining if there is enough room in said cache on said display computer for the set of character images;

means for removing cache entries until there is enough room in said cache, if there is not enough room in said cache on said display computer for the set of character images;

means for sending a request to said display computer to create one or more new cache entries for the set of character images; and

means for adding the set of character images to said list of sets of character images currently cached on said display computer.

42. (Withdrawn) The apparatus of claim 41, where said means for removing cache entries includes means for taking into account the last time the cache entry was used.

43. (Withdrawn) The apparatus of claim 38, further comprising means for subtracting said drawn-to region from one or more existing fill, miscellaneous, or RGB regions.

44. (Withdrawn) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for processing a

drawing command on a host computer in a computer system having a host computer and a display computer, the method comprising:

determining if the drawing command draws text to the screen; and

instructing the display computer to perform an equivalent action to the drawing command using a cache of one or more sets of one or more character images if the drawing command draws text to the screen.

45. (Cancelled) - Please cancel Claim 45, without prejudice.

46. (Withdrawn) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for reducing the storage or bandwidth requirements of a graphics image or reducing CPU usage in a computer system, the method comprising:
detecting a text command executed to create a portion of the graphics image;

computing a drawn-to region from said text command;
and

adding an entry specifying the text string, character set identifier, color, and text region to a linked list of text entries.